

Abstract

An optical fiber has a fiber core with a higher refractive index and a cladding surrounding the core with a lower refractive index. The fiber core is made of a multi-component oxide glass composition which consists of a glass-forming component and two Raman-active components. The glass former is SiO_2 and the Raman active components are of Li_2O and Nb_2O_5 . The concentration of the glass former is between 30 and 90 mol% and of the Raman active components is up to 50 mol% in total. The composition may further include a glass-modifying component of alkaline such as Li_2O , Na_2O , K_2O , Rb_2O , Cs_2O or earth-alkaline such as BeO , MgO , CaO , SrO , BaO in a concentration of up to 40 mol%.